

## WHAT IS CLAIMED IS:

## 1. A server comprising:

first means for categorizing permission setting values indicating whether object information items of various attribute of a registered user are disclosable to other persons or not depending on a level of the disclosability; and

second means for managing the permission setting values hierarchically.

## 2. A server according to claim 1, wherein

said first means categorizes said permission setting values into three respective levels for determining whether an open operation, a read operation, and a write operation are executable with respect to any of the object information items.

## 3. A server according to claim 2, wherein

said second means manages said permission values so that executability of open operation is set as a permission level higher than said executability of read operation, and executability of read operation is set as a permission level higher than said executability of write operation, and

said second means includes detection means for detecting contradiction in a specified one of the permission setting values based on vertical relations

among the permission levels.

4. A server according to claim 4, wherein,

said detection means checks, when there is a request from the user to change the setting value for either of the permission levels other than said executability of open operation for any of the object information items, consistency of the permission setting value for each level higher than the level for which the change request has been made with the setting value for which the change request has been made.

5. A server according to claim 4, wherein,

said detection means corrects, when there is contradiction in said consistency, the permission setting value for each level higher than the level for which the request to change the setting value has been made.

6. A server according to claim 4, wherein

said second means manages said object information items by imparting vertical relations thereto in accordance with types of the object information items and systematically categorizing the object information items.

7. A server according to claim 6, wherein,

said detection means checks, when there is a request from the user to change the permission setting

value for an arbitrary one of the levels for any of the object information items, consistency of the permission setting value belonging to each of the object information items higher in rank than the object information item to which the setting value that has received the change request belongs with the setting value that has received the change request.

8. A server according to claim 7, wherein,

said detection means corrects, when there is contradiction in said consistency, the permission setting value belonging to any of the object information items higher in rank than the object information item to which the setting value that has received said change request belongs.

9. A server according to claim 1, wherein

said second means manages said attribute information items by imparting vertical relations thereto in accordance with types of the attribute information items and systematically categorizing the attribute information items.

10. A server comprising:

an interface for receiving transmitted information;

storage means; and

means for reading information stored in the

storage means therefrom, wherein

said storage means has an entry table for storing object information items corresponding to various attribute of a registered user and permission setting values indicating whether said attribute information items are disclosable to other persons or not, said permission setting values being categorized in accordance with a level of the disclosability thereof.

11. A server according to claim 10, wherein

10 said permission setting values are categorized into a plurality of levels having vertical relations thereamong and

said entry table stores the setting value given to any of the plurality of levels.

15 12. A server according to claim 11, wherein

said permission setting values are categorized into three respective levels for determining whether an open operation, a read operation, and a write operation are executable with respect to any of the object information items, and

20 said entry table stores the setting value given to any of said three levels.

13. A server according to claim 11, further comprising:

25 means for extracting a request to change any of

the permission setting values from received information; and

judging means for judging whether or not the permission setting value for which said change request  
5 has been made is contradictory to any of the permission setting values higher in rank than the setting value by referencing said entry table.

14. A server according to claim 12, further having:

means for correcting, when there is contradiction  
10 between the setting value for which said change request has been made and any of the permission setting values higher in rank than the setting value, the higher rank permission setting value.

15. A server according to claim 11, further  
15 comprising:

an external storage device storing therein copy data of said entry table.

16. A method for controlling a server, comprising the step of:

20 categorizing permission setting values indicating whether object information items corresponding to various attribute of a registered user are disclosable to other persons or not into a plurality of levels; and

25 hierarchically managing said object information

items by imparting thereto vertical relations depending on a level of the disclosability.

17. A method according to claim 16, further comprising the steps of:

5       receiving, from said registered user, a request to change the permission setting value for a specified one of the object information items;

      determining a level of the permission setting value for which the change request has been made;

10       judging whether there is contradiction between the permission setting value belonging to any level higher than the determined level and the permission setting value for which said change request has been made; and

15       correcting, when there is contradiction, the permission setting value belonging to the level higher than said determined level.

18. A method according to claim 16, wherein said object information items are managed by imparting vertical  
20   relations thereto in accordance with types of the object information items and categorizing the object information items.

19. A method according to claim 18, further comprising the steps of:

25       receiving, from said registered user, a request

to change the permission setting value for a specified one of the object information items;

determining a level to which the object information item belongs;

5       judging whether or not there is contradiction between the permission setting value for the object information item belonging to any level higher than the level of the object information item to which the permission setting value that has received the change request belongs and the permission setting value that  
10       has received the change request; and

notifying, when there is contradiction, the user that the setting change request has been refused.

20. A service providing system comprising:

15       a presence server for categorizing permission setting values indicating whether object information items of various attribute of a registered user are disclosable to other persons or not depending on a level of the permission and hierarchically managing the  
20       permission setting values;

a service providing server for providing a service to a user; and

a terminal with which the user receives the service provided by said service providing server, wherein

25       said service providing server issues, to said

presence server, an access request for a specified one of the object information items of the user to which the service is to be provided,

said presence server transmits to said service  
5 providing server, a portion of the object information item for which the access request has been issued which can be given within a range of the permission setting values, and

the service providing server provides the service  
10 to the user based on the received portion of the object information item.

21. A method for providing a service using a system having at least a presence server which categorizes permission setting values indicating whether object  
15 information items of various attribute of a registered user are disclosable to other persons or not depending on a level of the permission and hierarchically manages the permission setting values; a service providing server which provides service to a user; and a terminal  
20 which allows the user to receive the provided service, the method comprising the steps of:

issuing from said service providing server to said presence server, an access request for a specified one of the object information items of the user to which  
25 the service is to be provided,



transmitting from said presence server to said service providing server, a portion of the object information item for which the access request has been issued which can be given within a range of the permission setting values, and

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providing service to the user by the service providing server based on the received portion of the object information item.